

FINAL

**ANNUAL REPORT TO THE LEGISLATURE
FOR YEAR 2009**

**COASTAL ANADROMOUS FISH PASSAGE
ASSESSMENT AND REMEDIATION
PROGRESS REPORT**

Prepared:

September 2010

**Prepared by the California Department of Transportation
Division of Environmental Analysis**

Progress Report January to December 2009 Purpose

This is the fifth annual report prepared in accordance with Article 3.5 of Chapter 1 of Division 1 of the Streets and Highways Code (SB 857, Kuehl) that took effect January 1, 2006. This law directs the California Department of Transportation (Department) to prepare an annual report describing the status of the Department's progress on locating, assessing, and remediating project-related barriers to fish passage. SB 857 also directs the Department to report its progress on developing a programmatic environmental review process to streamline the permitting process for remediating fish passage barrier projects.

This report describes the Department's fish passage activities between January 1 and December 31, 2009. On September __, 2010, Director McKim signed the *Memorandum of Understanding, A coordinated Approach to Restoring Fish Passage for Anadromous Salmonids in Coastal Watersheds through Creation of Fish Passage Forum*, making the Department a full signatory member of the Fish Passage Forum.

The Department issued a policy memorandum on July 7, 2006, from Jay Norvell, Chief, Division of Environmental Analysis (DEA), to District Deputy Directors and others. That memorandum set SB 857 related policy, provided a copy of SB 857 and provided fish passage assessment and reporting protocols. The DEA maintains internal intranet web pages that contain copies of various policy memoranda and guidance, including a page for fish passage assessment, an annual SB 857 reporting page and a permit streamlining page related to developing a programmatic environmental review process. These pages provide easy access to policy and guidance.

The Department issued a policy update memorandum on May 6, 2010, from Richard Land, Chief Engineer, updating program and reporting requirements, plan updates and new reporting schedules. The memorandum formally incorporates the elements of the Kempton/Eng agreement, directs districts to update fish passage plans, and provides direction for the development of district fish passage remediation.

Changes in Annual Reporting and Approach

The Department is making changes to the annual report to address the elements of the agreement between Assemblymember Eng (letter attached), Chair of the Assembly Transportation Committee, and Director Kempton dated May 26, 2009. The twelve changes are:

Requested Change: Prepare an annual report that describes fish passage remediation work completed in the prior calendar year, January 1 to December 31. Include schedules and locations for programmed remediations.

Implementation: Tables 1 and 2 below provide locations of remediations and project schedules for the calendar year from January 1, 2009 to December 31, 2009.

Requested Change: Define a fish passage barrier remediation project as a project that uses federal or State funding and is programmed through either the State Transportation Improvement Program (STIP) or through the State Highway Operation and Protection Program (SHOPP). Include new construction, rehabilitations, repairs, retrofits, alterations or maintenance projects.

Implementation: The Department directed that districts use the new project definition in project development.

Requested Change: Identify partial or complete fish passage "barriers" using the definitions in the DFG manual: "Fish Passage Evaluation at Stream Crossings."

Implementation: The Department directed that districts follow existing policy that incorporates DFG guidance into the Department's fish passage assessment and reporting protocols.

Requested Change: Provide fish passage assessment data to project design engineers.

Implementation: The Department directed that districts follow standard practice and policy to assess potential fish passage barriers and assure that new designs do not impede fish passage.

Requested Change: Provide fish passage barrier assessments to DFG so that assessments may be included in their database.

Implementation: The Department directed that assessments are shared with DFG for input into the DFG CalFish database system. This database system includes the Passage Assessment Database (PAD) which was designed in association with the Fish Passage Forum to house and share fish passage assessment data.

Requested Change: Develop remediation plans in consultation with DFG.

Implementation: The Department directed that districts consult with DFG following standard practice during project development.

Requested Change: Design remediation elements during the project design phase.

Implementation: The Department directed that districts remediation design occurs during project design.

Requested Change: Construct remediation elements.

Implementation: The Department directed that construction of remediation elements that are included in the final project design are standard project delivery activities.

Requested Change: Provide notice to DFG when barriers are remediated.

Implementation: The Department verified that notice of project completion is typically a requirement of permits and that the Department continues to notify DFG as required in permits.

Requested Change: Continue assessing culverts that are not part of planned projects, through the use of grant funding to assist long-range planning efforts.

Implementation: The Department continues to seek funding for nonproject remediations.

Requested Change: Work with DFG to jointly identify high-priority, transportation related, fish barriers by July 1, 2010, and annually thereafter.

Implementation: The Department identified current transportation related priorities shown in Table 4 below by July 1, 2010 and continues working with DFG to develop statewide fish passage barrier priorities.

Requested Change: Use available federal funds received pursuant to the American Recovery and Reinvestment Act of 2009 to the extent permitted under federal law.

Implementation: The American Recovery and Reinvestment Act of 2009 required that eligible projects be immediately ready to break ground for construction. The Act requirements did not allow time for the assessment studies, design work, right-of-way acquisition or permitting necessary for new fish passage projects.

Assessment and Remediation of Fish Passage Barriers

Project-level remediations since January 2006

Remediation Summary (15 projects): The location for Table 1 projects are shown on Figure 1.

Table 1. Completed Salmonid Fish Passage Barrier Remediations Since January 1, 2006					
Project #	District	County	Route	Post Mile	Project Name
1	1	Del Norte	101	4.04	Tributary to Elk Creek
2	1	Humboldt	101	115.3	Stone Lagoon
3	1	Humboldt	101	40.7	Chadd Creek
<u>4</u>	<u>1</u>	<u>Mendocino</u>	<u>101</u>	<u>81.4</u>	<u>Rattlesnake Creek¹</u>
<u>5</u>	<u>1</u>	<u>Del Norte</u>	<u>101</u>	<u>43.6-45.8</u>	<u>Smith River Widening (Lopez Creek)¹</u>
6	2	Siskiyou	96	65.0-65.5	O'Neil Creek; Tributary to Klamath River
7	2	Tehama	5	16.9	Elder Creek
8	2	Tehama	5	28.1	Dibble Creek
9	2	Shasta	299	20.75	Salt Creek, Sacramento Tributary
10	3	Sierra/ Yuba	49	4.0-9.4	Sierra 49 Culvert Replacement
11	5	Santa Barbara	101	33.9	El Capitan Creek
12	5	Santa Barbara	101	41	Arroyo Hondo
13	5	Santa Barbara	101	47.19	Gaviota Creek
14	5	Santa Cruz	1	10	Valencia Creek; Tributary to Aptos Creek
15	5	Santa Cruz	1 and 17	17.4-17.42	Branciforte Creek and Carbonera Creek

¹ Projects completed in 2009 are shown in bold underlined Text.

Active Projects Summary (32 projects): The location for Table 2 projects are shown on Figure 2.

Three new projects were added to this table (project numbers 10, 18, and 19). Three projects have projected completion dates (CCA dates) that have been extended one year (project numbers 3, 9, and 20). Three District 7 (Ventura County) projects were removed from the list ("San Antonio Creek Bridge Replacement," "Lion Creek" and "Sisar Creek and Santa Paula Creek"). These sites were originally added due to potential temporary construction issues that have been resolved.

Table 2. Active Projects with Fish Passage						
Project #	District	County	Route	Post Mile	Date¹	Project Name
Culvert Projects						
1	1	Mendocino	1	62.5	DNS	Culvert Rehabilitation, Tributary to Pudding Creek
2	1	Mendocino	1	92.83	CCA 1/1/2014	Dunn Creek Fish Passage
<u>3</u>	<u>1</u>	<u>Mendocino</u>	<u>101</u>	<u>8.0- 17.8</u>	<u>CCA</u> <u>1/1/2018</u>	<u>Hopland Bypass³</u>
4	1	Mendocino	101	Multiple	CCA 11/1/2012	36 Culverts
5	1	Mendocino	101	84	DNS	Rattlesnake Creek
6	1	Mendocino	128	39.88	DNS	Beebe Storm Damage
7	1	Mendocino	128 and 253	0.0- 50.1	CCA 11/1/2012	264 Culverts
<u>8</u>	<u>1</u>	<u>Mendocino</u>	<u>101</u>	<u>14.4- 14.8</u>	<u>DNS</u>	<u>McBrindle Creek⁴</u>
<u>9</u>	<u>1</u>	<u>Humboldt</u>	<u>101</u>	<u>98.5- 100.9</u>	<u>CCA</u> <u>10/01/2011</u>	<u>Red Mountain Creek Fish Passage³</u>
<u>10</u>	<u>2</u>	<u>Shasta</u>	<u>299</u>	<u>322.5</u>	<u>CCA</u> <u>7/14/2014</u>	<u>Bella Diddy (Lemm Creek)²</u>
11	4	Marin	1	22.7	CCA 12/1/2014	Giacomini Creek
12	4	Sonoma	1	32.4	CCA 12/1/2014	Fort Ross Creek
13	4	Sonoma	1	15.1- 15.8	CCA 12/1/2013	Gleason Beach
14	5	Santa Barbara	1	15.6	CCA 4/1/2014	Salsipuedes Creek
15	5	Santa Barbara	101	0	CCA 9/1/2014	Rincon Creek
16	7	Los Angeles	1	50.3	DNS	Solstice Creek ⁴

Table 2. Active Projects with Fish Passage continued

Project #	District	County	Route	Post Mile	Date ²	Project Name
Bridge Projects						
17	2	Tehama	99	13.9-14.2	CCA 7/15/2013	Craig Creek and Sunset Canal Bridges
<u>18</u>	<u>2</u>	<u>Tehama</u>	<u>36</u>	<u>91.46</u>	<u>CCA</u> <u>1/4/2013</u>	<u>Mill Creek²</u>
<u>19</u>	<u>2</u>	<u>Tehama</u>	<u>99</u>	<u>13.9-14.3</u>	<u>CCA</u> <u>2/17/2014</u>	<u>North Fork Mill Creek²</u>
<u>20</u>	<u>2</u>	<u>Trinity</u>	<u>299</u>	<u>68.0-68.2</u>	<u>CCA</u> <u>10/14/2011</u>	<u>Trinity Dam Boulevard, Fish Ladder, Little Grass Valley Creek³</u>
21	4	Alameda	84	12.1-13.3	CCA 10/1/2013	Niles Canyon Safety Improvement Project (Stonybrook Creek)
22	5	Santa Barbara	101	2.2	DNS	Carpinteria Creek
23	5	Santa Barbara	101	55	CCA 2/1/2011	Nojouqi Creek, Santa Ynez
24	5	Santa Barbara	192	15.5	CCA 6/1/2013	Arroyo Parida Creek
25	5	Santa Cruz	1	31.55	DNS	Scott Creek
26	5	Santa Cruz	1	36.3	DNS	Waddell Creek
27	7	Ventura	150	28.7	CCA 8/1/2012	Santa Paula Creek
Culvert and Bridge Projects						
28	4	Napa	121	0.3-2.0	CCA 10/1/2014	Duhig Road Realign Curves and Widen Shoulders
29	4	Santa Clara/ San Benito	101	5.0-0.0-4.9	CCA 10/1/2013	Widening of U.S. Highway 101 from Monterey Road (Santa Clara) to State Route 129 (San Benito)
Partnership Projects						
30	12	Orange	5	11.3	CalTrout Lead	Trabuco Creek
31	12	Orange	5 and 241	0	CCA 5/1/2018	San Mateo Creek

Changes from 2009 data are indicated in bold and underlined text. ¹ CCA "Construction Contract Completion." DNS "Date Not Scheduled." Dates are estimated pending funding, permitting, and regulatory negotiations. ² New projects added in 2009. ³ Projects have revised CCA dates. ⁴ Projects formerly had CCA dates but are under revision and currently have no published schedule (DNS)

Project-Level Surveys (Capital-funded work)

The Department's District 4 (San Francisco Bay area) completed six Fish passage assessments in 2009 that indicated potential barrier issues.

Table 3. 2009 Caltrans District 4 fish passage assessment locations

Date	PAD ID ¹	County	Route	Post Mile	Project Name	Stream	Tributary to:
9/1/09	732813	Sonoma	128	17.3	Maacama Creek and Redwood Creek Bridges Replacement Project	Maacama Creek	Russian River
9/1/09	732816	Sonoma	128	21.8	Maacama Creek and Redwood Creek Bridges Replacement Project	Redwood Creek	Maacama Creek
11/16/09	PAD ID requested 7/29/09	Napa	121	6.4-6.5	Tulucay Creek Bridge Replacement	Tulucay Creek	Napa River
9/18/09	PAD ID requested 7/29/09	Solano	80	24.8	Alamo Drive Onramp Lengthening	Alamo Creek	Ulati Creek
8/25/09	733789	San Mateo	101	16.30-17.06	101 Broadway Interchange	Easton Creek	San Francisco Bay
4/30/09	700007	Alameda	84	13.1-13.6	Alameda Creek Bridge Replacement Project	Alameda Creek	San Francisco Bay

¹ PAD_ID is a number used to identify assessments entered into the DFG CALFISH Passage Assessment Database (PAD).

Planning-level assessments

The Department has completed Reconnaissance Surveys on more than 5200 anadromous fish-bearing, coastal, road-stream crossings, and completed Detailed Surveys on more than 775 of these crossings. Current estimates suggest that an additional 4400 Reconnaissance Surveys and an additional 2400 Detailed Surveys will be needed. Priorities for planning-level fish passage assessment were identified according to the planning document, *Prioritization of Fish Passage Surveys on State Highway System Road-Stream Crossings in California's Coastal Watersheds*, March 2007.

No Grants awarded

The Department continues to seek funding to complete Detailed Surveys where needed. Detailed Surveys will determine the species and life stages that may be inhibited from passage and provide data that will be used to determine remediation priorities.

The Department submitted a 2009-10 grant proposal to the DFG Fisheries Restoration Grant Program. The proposal requested funding to obtain rights-of-entry and conduct detailed surveys at high-priority crossings to be selected from the Department-DFG fish passage priority list that is under development. The proposal was not funded. The Department will submit a 2010-11 grant application with additional information based on the final priority list.

The Department requested State Planning and Research (SPR) grant funds to continue fish passage assessment surveys. The SPR program has two grant objectives related to planning (SPR1) and research (SPR2) activities. The ongoing and long term fish passage assessment project no longer fits the goals and objectives of the SPR funding requirements.

Annual Barrier Priorities

Priority List (21 crossings): The location for Table 4 projects are shown on Figure 3.

Table 4 contains road-stream crossings that the Department considers high priority for remediation. All listed crossings have equal priority at this time; however, the Department and DFG continue working towards a combined transportation-related fish passage remediation priority list. The Department and DFG are working with the Fish Passage Forum to develop a statewide, technical, fish passage barrier priority ranking system.

Table 4. 2010 Caltrans Transportation-Related Fish Passage Barrier Remediation Priorities						
District	County	Route	Post Mile	Site Name	Stream	Tributary
1	Mendocino	101	52.25	S. Fork Ryan Creek	Ryan Creek	Outlet Creek
1	Mendocino	101	48.14	Upp Creek	Upp Creek	Mill Creek
1	Del Norte	197	5.00	Sultan Creek.	Sultan Creek	Smith River
1	Humboldt	254	4.18	Fish Creek Ave. of the Giants	Fish Creek	S. Fork Eel River
2	Tehama	5	28.10	Dibble Creek	Dibble Creek	Sacramento River
2	Siskiyou	96	65.0-65.5	O'Neil Creek	O'Neil Creek	Klamath River
2	Shasta	299	32.20	Yank Creek (Lemon Creek Bridge)	Yank Creek	Cow Creek/ Sacramento River
2	Trinity	299	68.0-68.2	Little Grass Valley Creek	Little Grass Valley Creek	Grass Valley Creek/ Trinity River
4	Alameda	84	12.1-13.3	Niles Cyn Safety Improvement (Stonybrook Creek)	Stonybrook Creek	Alameda Creek
4	Napa	121	6.4-6.5	Tulucay Creek Bridge Replacement	Tulucay Creek	Napa River
5	Santa Barbara	1	15.61	Salsipuedes Creek	Salsipuedes Creek	Santa Ynez River
5	Santa Barbara	101	2.20	Carpinteria Creek	Carpinteria Creek	Pacific Ocean

Table 4. 2010 Caltrans Transportation-Related Fish Passage Barrier Remediation Priorities, continued						
District	County	Route	Post Mile	Site Name	Stream	Tributary
5	Santa Barbara	101	22.3–23.0	San Pedro Creek	San Pedro Creek	Goleta Slough
5	Santa Barbara	192	15.5	Arroyo Parida	Arroyo Parida	Pacific Ocean
7	Los Angeles	1	50.30	Solstice Creek	Solstice Creek	Pacific Ocean
7	Ventura	126	26.48	Hopper Creek	Hopper Creek	Santa Clara River
7	Ventura	126	28.81	Piru Creek	Piru Creek	Santa Clara River
7	Ventura	150	28.70	Santa Paula Creek	Santa Paula Creek	Santa Clara River
11	San Diego	76	29.46	SR-76 Pauma Creek	Pauma Creek	San Luis Rey River

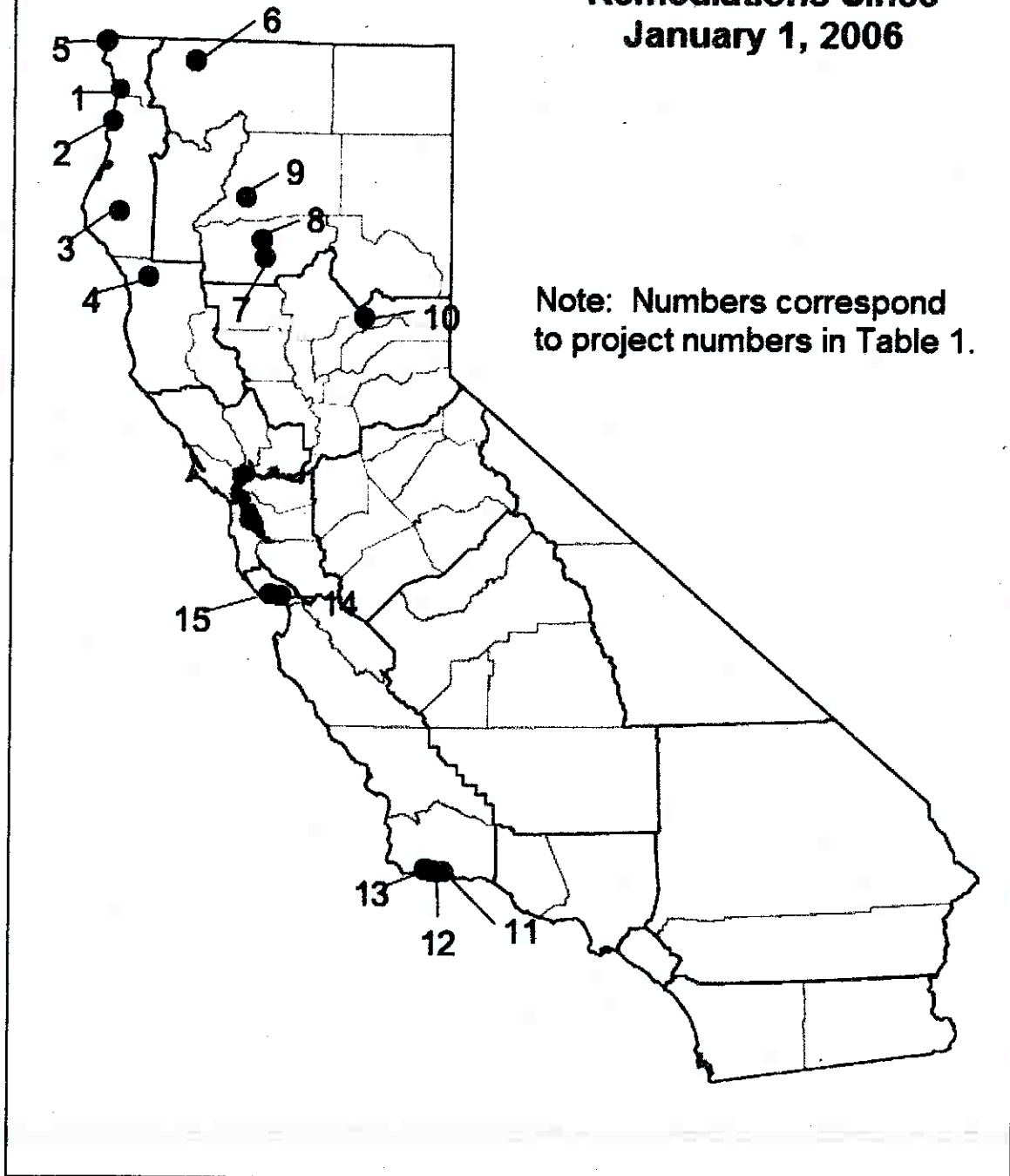
Programmatic Environmental Review Process

Agency Agreements

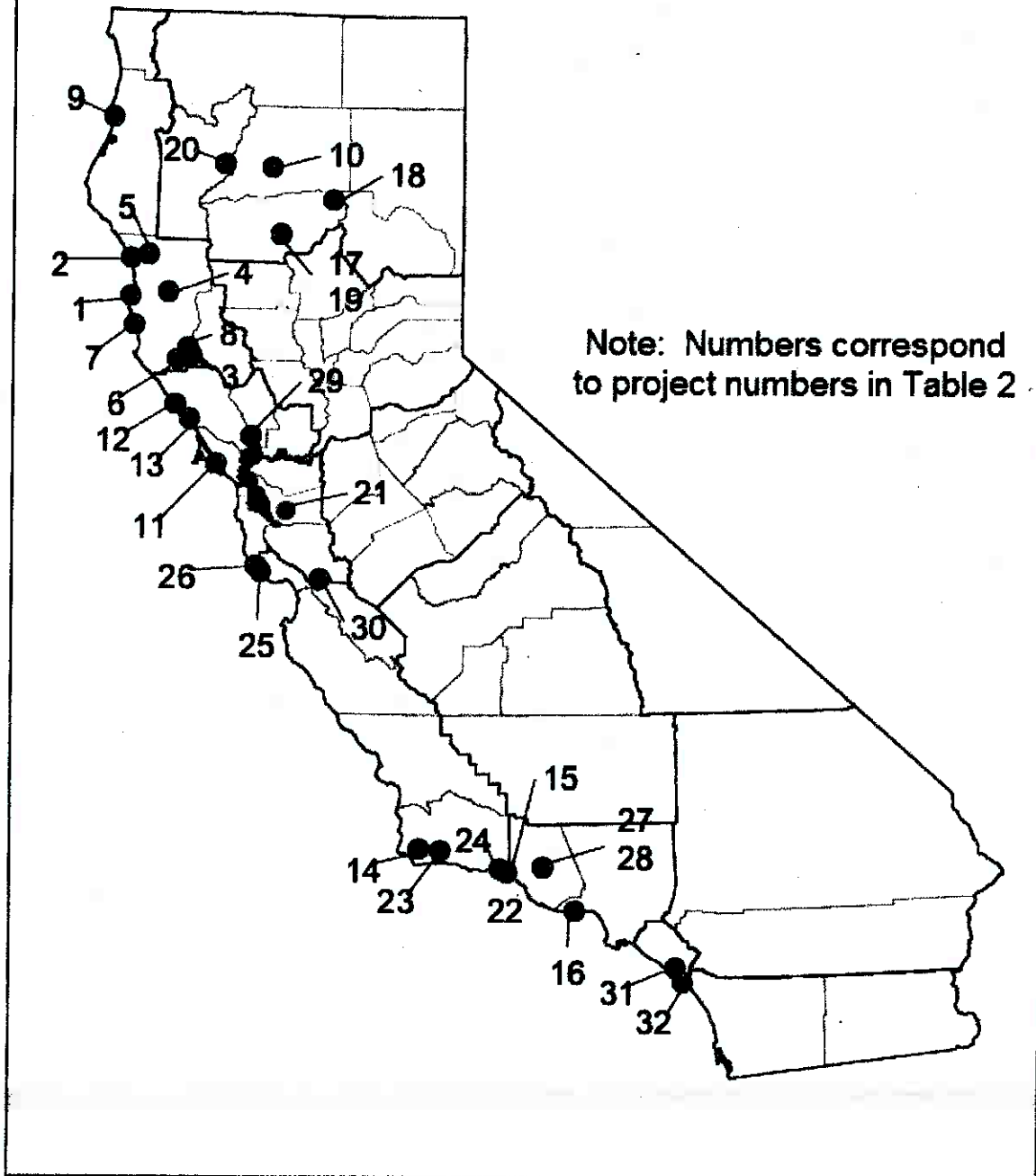
The Department continues working with DFG, the National Oceanic and Atmospheric Administration National Marine Fisheries Service (NMFS), and the U.S. Fish and Wildlife Service (USFWS) to negotiate streamlined environmental review and permitting procedures to improve fish passage remediation. The agencies met to develop programmatic environmental authorizations for activities that can be characterized as routine maintenance and for small projects that improve or provide fish passage. Routine maintenance includes culvert repair, culvert cleaning, and vegetation management. Small-impact projects that typically include fish passage remediation efforts include culvert installation, weir and baffle installation, and small bridge construction.

The geographic scope of this programmatic agreement includes coastal drainages from the Oregon border to Santa Cruz County. The agreement requires consultation on approximately 58 plant species and 33 fish and wildlife species that may be affected. Federal agencies prepared biological assessments to provide supporting documentation for their proposed actions. The administrative draft of the biological assessment for NMFS was reviewed. Final modifications and an analysis of the projected extent of incidental take have been incorporated into the document. After reproduction is complete, the biological assessments will be transmitted to the federal trustee agencies for review.

**Figure 1: Completed
Fish Passage Barrier
Remediations Since
January 1, 2006**



**Figure 2: Active Fish
Passage Projects**



**Figure 3: Caltrans 2010
Transportation Related Fish
Passage Barrier
Remediation Priority**

